

Issues and analysis

3.1 This chapter will cover the following issues:

- Governance and cross sectoral collaboration:
- Smaller industries and innovation;
- Local and regional development; and
- RIRDC evaluation framework.

Governance and cross-sector collaboration

3.2 Australia has fifteen rural Research and Development Corporations (RDCs) that span a multitude of industries and are funded from a variety of sources, including significant government contributions. All RDCs work collaboratively with industry to achieve identified outcomes and to further research and development (R&D) in the rural sector so.

3.3 Given the significant government contribution to the rural R&D effort, it is important to ensure appropriate governance structures are in place. Such structures ensure that resources are allocated to identified outcomes within the National and Rural Research Priorities as defined in Chapter 2.

3.4 RDCs can be defined as either statutory, governed under the *Primary Industries and Energy Research Development Act 1989* (Cth) (the “PIERD Act”), or owned by the industry that it represents. In the latter case, the RDC holds accountabilities under the *Corporations Act 2001* (Cth) and other industry-specific legislation.

3.5 Table 1 below provides a brief snapshot of the division in the two types of RDCs.

Table 1 Rural and Research Development Corporations

Statutory	Industry
Cotton	Australian Egg Corporation
Fisheries	Australian Livestock Export Corporation Limited
Grains	Australian Meat Processor Corporation
Grape and Wine	Australian Pork Limited
Rural Industries	Australian Wool Innovation Limited
Sugar	Dairy Australia Limited
	Forest and Wood Products Australia
	Horticulture Australia Limited
	Meat and Livestock Australia

Source Table 1, Australian Government Rural Research and Development Policy Statement, p. 6.

- 3.6 The Australian Government has moved to reform, clarify and strengthen the operation of RDCs given the complexity of their roles and operations. In doing so, a number of processes have occurred. In the first instance, the Australian Government commissioned reports from the Rural Research and Development Council (the "Council") and the Productivity Commission. The Council was commissioned to examine current government rural R&D investment priorities while the Productivity Commission was tasked with examining the overall RDC model.
- 3.7 The Australian Government responded to each report through the *Australian Government Rural Research and Development Policy Statement*.¹ The policy statement supported a range of measures, including emphasising the Australian Government's commitment to cross-sectoral collaboration through existing structures such as the National Primary Industries Research, Development & Extension Framework (NPIRDEF). In

1 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>>.

addition, the Policy Statement tasked the Australian Research Committee (ARCom) to assess the level of coordination of Australian Government rural R&D investment.

- 3.8 The remainder of this section discusses each of these major initiatives, including:
- the Rural Research and Development Council;
 - the Productivity Commission inquiry;
 - the National Primary Industries Research, Development & Extension Framework;
 - the Australian Government Rural Research and Policy Statement; and
 - the Australian Research Committee.
- 3.9 The section then discusses RIRDC's role within the governance framework and in cross-sectoral collaboration.

Rural Research and Development Council

- 3.10 The Rural Research and Development Council (the "Council") was appointed by the Minister for Agriculture, Fisheries and Forestry in 2009. The Council's membership consisted of pre-eminent members of the scientific, research and development community, chaired by Dr Kate Fairley-Grenot. The group also included Australia's chief scientist.
- 3.11 The Terms of Reference developed to guide the Council's work were to:
- develop a National Strategic Rural Research and Development (R&D) Investment Plan based on an agreed list of national priorities for profitable, globally competitive, sustainable, innovative and adaptable primary industries
 - establish a performance measurement and reporting framework against an agreed list of national priorities¹ and key performance indicators
 - advise on enhancing cross-sectoral, cross-disciplinary, cross-jurisdictional and international cooperation and collaboration
 - advise on improving communication and uptake of new knowledge and technology across all rural industries and at all scales of enterprises
 - foster innovation as integral to the culture of rural communities and industries

- foster the capacity building in the rural R&D sector to ensure Australia is prepared for challenges to global competitiveness, productivity, adaptability and sustainable development into the future; including challenges associated with climate change
- advise on any other matters relating to rural R&D referred to it by the Minister.²

3.12 The Council delivered two reports, in particular, the National Strategic Rural R&D Investment Plan.³ The Plan made fourteen recommendations:

- One recommendation calling for greater investment in Australia's rural R&D capacity to increase longer term sustainability;⁴
- Nine recommendations calling for R&D investment to be made in accordance with five themes – 'industry development, sustainable production, transformational RD&E, capacity in people and international links';⁵
- One providing an initial investment balance across the R&D system, with long and mid-term investment allocated 40% and 30% of investment respectively;⁶
- One instituting a new performance management and reporting framework;⁷ and
- Two recommendations calling for endorsement of the Plan and the endorsement of a key advisory body to guide effective cooperation and prioritisation.⁸

2 Rural Research and Development Council (2011), *National Strategic Rural and Research Development Investment Plan*, p. vii.

3 Department of Agriculture, Fisheries and Forestry, *National Strategic Rural and Research Development Investment Plan* (20 May 2013) <<http://www.daff.gov.au/agriculture-food/innovation/national-strategic-rural-research-and-development-investment-plan>>

4 Rural Research and Development Council (2011), *National Strategic Rural and Research Development Investment Plan*, p. 4.

5 Rural Research and Development Council (2011), *National Strategic Rural and Research Development Investment Plan*, pp. 5-7.

6 Rural Research and Development Council (2011), *National Strategic Rural and Research Development Investment Plan*, p. 8.

7 Rural Research and Development Council (2011), *National Strategic Rural and Research Development Investment Plan*, p. 8.

8 Rural Research and Development Council (2011), *National Strategic Rural and Research Development Investment Plan*, p. 9.

Productivity Commission Inquiry

3.13 In improving governance for Australia's RDCs, the Australian Government asked the Productivity Commission to examine a range of issues relating to the operation of RDCs.⁹ The Commission's Terms of Reference were:

- examine the economic and policy rationale for Commonwealth Government investment in rural R&D;
- examine the appropriate level of, and balance between public and private investment in rural R&D;
- consider the effectiveness of the current RDC model in improving competitiveness and productivity in the agriculture, fisheries and forestry industries through research and development;
- examine the appropriateness of current funding levels and arrangements for agricultural research and development, particularly levy arrangements, and Commonwealth matching and other financial contributions to agriculture, fisheries and forestry RDCs;
- consider any impediments to the efficient and effective functioning of the RDC model and identify any scope for improvements, including in respect to governance, management and any administrative duplication;
- consider the extent to which the agriculture, fisheries and forestry industries differ from other sectors of the economy with regard to research and development; how the current RDC model compares and interacts with other research and development arrangements, including the university sector, cooperative research centres and other providers; and whether there are other models which could address policy objectives more effectively;
- examine the extent to which RDCs provide an appropriate balance between projects that provide benefits to specific industries versus broader public interests including examining interactions and potential overlaps across governments and programs, such as mitigating and adapting to climate change; managing the natural resource base; understanding and responding better to markets and consumers; food security, and managing biosecurity threats;
- examine whether the current levy arrangements address free rider concerns effectively and whether all industry participants

9 Productivity Commission, 'Rural Research and Development Corporations', *Inquiry Report 52*, February 2011, p. xiv.

are receiving appropriate benefits from their levy contributions.¹⁰

3.14 The Commission's report highlighted several concerns relating to the RDC model. The Commission's core concerns included that the current model:

- does not cater well for broader rural R&D needs;
- has a high level of public funding for industry-focused research given the sound financial reasons that producers or industries would have to fully fund much of this research; and
- the Government's matching contribution to RDCs provide no incentive for producers to increase their long term investments in the model.¹¹

3.15 The Productivity Commission also identified a complex overall framework that relates to 'planning, funding and delivering rural R&D in Australia':

There are multiple funders and suppliers of rural R&D, with public funding spread both across and within levels of government ... While this often makes it difficult to track funding and spending flows, the Commission estimates that governments provide around 75 per cent of overall funds, with nearly two thirds of the public contribution coming from the Australian Government.¹²

3.16 While the Commission supported the retention of the current model, it recommended significant changes to the method of Government contribution to RDCs. The Commission made nineteen recommendations and core of these were that:

- The current cap on dollar for dollar matching of industry contributions by the Government should be halved over a ten-year period;
- A new, uncapped, subsidy at the rate of 20 cents in the dollar should be immediately introduced for industry contributions above the level that attracts dollar for dollar matching; and
- A new, government funded, RDC - Rural Research Australia (RRA) - should be created to sponsor broader rural research. With RRA in place, the other RDC's (except for the Fisheries

10 Productivity Commission, 'Rural Research and Development Corporations', *Inquiry Report 52*, February 2011, p. xiv.

11 Productivity Commission, 'Rural Research and Development Corporations', *Inquiry Report 52*, February 2011, p. xiv.

12 Productivity Commission, 'Rural Research and Development Corporations', *Inquiry Report 52*, February 2011, p. 9.

RDC) should be left to focus predominantly on funding of research of direct benefit to their industry constituents.¹³

National Primary Industries Research, Development & Extension Framework (NPIRDEF)

- 3.17 In working towards improved cross-collaboration, the Council of Australian Governments (COAG) has, jointly with industry, developed the National Primary Industries Research, Development & Extension Framework (NPIRDEF).¹⁴
- 3.18 Established in 2007, the role of NPIRDEF is to promote greater collaboration and improvement in primary industries.¹⁵ NPIRDEF:
- ... will facilitate greater coordination among the different Commonwealth, State governments, CSIRO, RDCs, industry and university sectors to better harmonise their roles in RD&E related to primary industries and assure that they work together effectively to maximise net benefits to Australia...
- The National RD&E Framework supports a strong culture of collaboration and coordination between the bodies, strengthens national research capability to better address sector and cross sector issues and focuses research, development and extension (RD&E) resources so they are used more effectively, efficiently and collaboratively, thereby reducing capability gaps, fragmentation and unnecessary duplication in primary industries RD&E.¹⁶
- 3.19 In meeting these aims, NPIRDEF has identified a number of key outcomes:
- To provide shared strategic directions and priorities for national and sector level primary industries RD&E in Australia that enhance the productivity and sustainability of Australia's primary industries;
 - Research capability will more comprehensively and holistically cover the present and future strategic needs of stakeholders nationally;

13 Productivity Commission, 'Rural Research and Development Corporations', *Inquiry Report 52, February 2011*, p. xiv.

14 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>>p. 18.

15 Department of Agriculture, Fisheries and Forestry, *National Primary Industries Research, Development and Extension Framework* (20 May 2013) <<http://www.daff.gov.au/agriculture-food/innovation/national-primary-industries>>

16 National Primary Industries Research, Development and Extension Framework, *Purpose of the Framework* (20 May 2013) <http://www.npirdef.org/purpose_of_the_framework>

- Public research capability will become more integrated, interdependent and specialised, and have larger critical mass with less fragmentation across the nation;
- Efficiency and effectiveness of RD&E will be improved and as a consequence returns on investment will improve;
- RD&E investment will improve the capability of the national system in priority areas and ensure effective and efficient use of resources, including infrastructure;
- The Parties will collaborate to retain and build capability in fields strategically important to their jurisdictions and industries;
- The national research capability will be an integral component of a wider innovation agenda, supporting development and extension; and
- Research undertaken in one location will be developed and extended nationally for primary industries.¹⁷

3.20 The Primary Industries Ministerial Council (PIMC), part of COAG, has endorsed a range of RD&E strategies to be undertaken through NPIRDEF:

- 14 sectoral strategies: beef, cotton, dairy, fishing and aquaculture, forestry, grains, horticulture, new and emerging industries, pork, poultry, sheep meat, sugar, wine, and wool.
- 4 cross-sectoral strategies: animal welfare, biofuels and bioenergy, climate change and water use in Australian agriculture.¹⁸

3.21 These are in conjunction with a number of strategies in NPIRDEF that are already underway – animal biosecurity, food & nutrition, plant biosecurity and soils.

3.22 The NPIRDEF Statement of Intent requires that an independent review of the Framework is undertaken within three years of its commencement.¹⁹ In particular, an independent review should consider:

- (a) the implementation of the National RD&E framework;
- (b) the effectiveness in achieving its stated objectives and outcomes;

17 National Primary Industries Research, Development and Extension Framework, *Framework Outcomes* (20 May 2013) <http://www.npirdef.org/framework_outcomes>

18 Department of Agriculture, Fisheries and Forestry, *National Primary Industries Research, Development and Extension Framework* (20 May 2013) <<http://www.daff.gov.au/agriculture-food/innovation/national-primary-industries>>

19 National Primary Industries Research, Development and Extension Framework, *Statement of Intent* (20 May 2013) <http://www.npirdef.org/statement_of_intent> Item 12, p. 12.

(c) the effectiveness of the National RD&E Framework in achieving its objectives and outcomes; and

(d) other such relevant matters as required.²⁰

3.23 In fulfilling this, the Department of Primary Industries Victoria commissioned the Allen Consulting Group to undertake a review of NPIRDEF. The review found that the Framework had:

- created a national approach to primary industries research, development and extension;
- been successful in promoting collaboration and cooperation between Parties, breaking down state barriers and shifting attitudes from competition to cooperation;
- reduced duplication and reallocated resources to areas of priority;
- provided a greater understanding of national capability, identifying gaps and areas of capability that need to be maintained and/or enhanced for the future; and
- increased knowledge and information sharing.²¹

3.24 The review makes twelve recommendations for improvement in NPIRDEF. Summarising these, the review states:

It is recommended that the RD&E Framework Parties reaffirm their commitment to the RD&E Framework and to supporting sectoral and cross-sectoral Strategies. The performance of some Strategies is disappointing and needs to be improved.

Enhancing collaboration and cooperation particularly with universities, as well as between Strategies, will identify additional synergies and further reduce duplication. As the RD&E Framework moves ahead, greater focus on the implementation of Strategies will increase benefits under the RD&E Framework.

Enhancing alignment will ensure that primary industries RD&E is focused on national priorities. Additionally, streamlining capability audits would enable a comparable data set to be gathered and provide a comprehensive indication of capability across all sectors and cross sectors of primary industries RD&E.

Knowledge and information sharing under the RD&E Framework could be further improved, particularly in relation to extension, as

20 National Primary Industries Research, Development and Extension Framework, *Statement of Intent* (20 May 2013) <http://www.npirdef.org/statement_of_intent> Item 12, p. 12.

21 The Allen Consulting Group (2012) *Evaluation of the National Primary Industries RD&E Framework*, pp vi – vii.

well as through greater communication from PISC to all relevant Parties. There are also concerns in relation to the oversight of the RD&E Framework, including its reliance on DPI Victoria, a lack of mechanisms to ensure that all Parties are contributing to the RD&E Framework as agreed, and the extent of the PISC's authority.²²

Australian Government Rural Research and Development Policy Statement

3.25 The Australian Government's Rural Research and Development Policy Statement (the "Policy Statement") was released in July 2012 by the Minister for Agriculture, Fisheries and Forestry.

3.26 In releasing the Policy Statement, the Minister said:

The policy statement highlights the Australian Government's enduring commitment to world-class rural RD&E and our strong partnership with industry. It outlines how we will improve the effectiveness of the system. It provides clarity for participants on government priorities and expectations. It shows how we will use the opportunities presented by the commission's report and the council's investment plan to ensure our policy settings enable the RDCs and other players in the system to achieve the best possible results for industry and the community.²³

3.27 The Policy Statement:

- outlines mechanisms to increase transparency and accountability including the introduction of statutory funding agreements, performance reporting standards and measures to increase communication;
- outlines steps to strengthen coordination of R&D;
- outlines initiatives for increased productivity including encouragement of R&D investment by the private sector, facilitating timely adoption of research results and building the capacity of the rural research workforce; and
- outlines changes to the efficiency and effectiveness of the RDC model to ensure value for money including project evaluations, selection

22 The Allen Consulting Group (2012) Evaluation of the National Primary Industries RD&E Framework, pp vi - vii.

23 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>>, p. iii.

processes for RDC board members, and the capacity for marketing by statutory RDCs.²⁴

- 3.28 The Policy Statement also explicitly responded to the reports of the Council and the Productivity Commission.
- 3.29 In responding to the Council's report, the Australian Government agreed with ten of the Council's recommendations, while agreeing in principle or noting the remainder. In particular, the Australian Government stated that it did not intend to pursue the recommendation to determine Australia's R&D investment balance based on fixed criteria, preferring that performance monitoring informed future investment decisions.²⁵
- 3.30 In responding to the Productivity Commission's report, the Australian Government agreed with fourteen of the Commission's nineteen recommendations. Of relevance to the Committee's inquiry was the Policy Statement's rejection of the Productivity Commission's recommendation that a new agency, Rural Research Australia be created to focus on broader research outcomes.²⁶ Instead the Government said that it favoured an increase in collaboration and cross-sectoral research within existing arrangements such as the National Primary Industries R&D Extension Framework²⁷
- 3.31 In this regard, the Policy Statement emphasises that:

The Australian Government believes system participants need to exhibit a greater level of commitment to collaborate and undertake cross-sectoral research on issues with multiple industry and community beneficiaries and outcomes. Cross-sectoral R&D in particular often results in direct benefits for the industries involved as well as spillover benefits for the community. For example, research that leads to improved land management practices can deliver multiple benefits. Such benefits can include increased productivity from lower input use, and environmental

24 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>>, pp. 2-3.

25 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>>, p. 46.

26 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>>, p. 18.

27 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>>, p. 34.

services such as biodiversity protection and improved air and water quality.²⁸

Australian Research Committee

3.32 The Australian Research Committee (ARCom) was established following the recommendations of a review of Australia's publicly funded research.²⁹ Its primary role is to:

... provide integrated and strategic advice on investment across the science, research and innovation system, including in the areas of human capital, infrastructure and collaborative activities.³⁰

3.33 In addition to this work, the Australian Government, through the Policy Statement, asked ARCom to assess the level of Australian Government rural R&D investment. In doing so, ARCom:

... will advise on whether any improvements can be made in terms of more coordinated funding arrangements and priority-setting, opportunities for collaboration or increasing the focus on rural research. This assessment will cover portfolio-specific R&D funding programs, as well as the CSIRO, RDCs, universities, CRCs and the Australian Research Council.³¹

RIRDC's role in cross-sectoral collaboration

3.34 The RIRDC is the only RDC, either statutory or industry-owned that is involved in a broad cross section of industries. As such, the RIRDC Annual Report 2011-12 notes that the Corporation is uniquely placed to expand investment on cross-sectoral issues.³²

3.35 The RIRDC Annual Report 2011-12 states that:

28 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>> p. 18.

29 Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, *Australian Research Committee* (20 May 2013) <<http://www.innovation.gov.au/Research/Pages/AustralianResearchCommittee.aspx>>

30 Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, *Australian Research Committee* (20 May 2013) <<http://www.innovation.gov.au/Research/Pages/AustralianResearchCommittee.aspx>>

31 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>> p. 17.

32 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 9.

Many of the challenges facing Australian agriculture are wider than just a specific sector, an individual state, or a certain type of animal or crop. A significant proportion of the challenges faced cut across state boundaries, and affect a myriad of industries.

That is why RIRDC works in collaboration with a range of industry and government stakeholders to develop and implement research and development initiatives. We also recognise that the most effective way to grasp opportunities for the agriculture industry is to work closely with relevant parties who are equally committed to the future of Australia's rural communities.³³

Collaboration under the RIRDC Corporate Plan 2012 - 17

- 3.36 In furthering its investment framework and continue its cross-sectoral collaboration activities, the RIRDC has released the RIRDC Corporate Plan 2012 - 17.³⁴
- 3.37 The framework of RIRDC's investment through this plan has three overarching goals:
- Goal 1: promote leadership and innovation in the rural sector
 - Goal 2: increase profit and productivity in rural industries
 - Goal 3: enhance sustainability across the rural sector.³⁵
- 3.38 In developing the plan, RIRDC have also identified nine priority areas to guide its work:
- Productivity growth to support rural industry profit and sustainability
 - Building evidence about emerging issues impacting on the rural sector
 - Ensuring new industry (and innovation) potential is explored in a rigorous way and the knowledge gained is shared
 - Applying a life-cycle approach to supporting rural industries
 - Collaborating to respond to cross sector RD&E needs
 - Supporting new industries
 - Maintaining and building rural research capacity
 - Investing in rural sector people
 - Enhancing the adoption of RD&E.³⁶

33 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 25.

34 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 14.

35 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 14.

36 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 14.

RIRDC collaborative work under NPIRDEF

3.39 RIRDC is also involved in collaborative work under NPIRDEF. The RIRDCs Annual Report 2011-12 states that the Corporation is involved in the New and Emerging Industries, Poultry, and Biofuels and Bioenergy strategies.³⁷

3.40 At the Committee's public hearing, Mr Craig Burns of RIRDC commented on NPIRDEF, stating:

These strategies bring together all the players with money and agree what the strategy will be, so we are not tripping over each other but we are leveraging more funds and we are trying to maximise bang for bucks. We are involved in a lot of those cross-sectoral strategies.³⁸

3.41 Mr Burns expanded on RIRDCs involvement with the NPIRDEF collaboration.³⁹ He told the Committee that RIRDC would soon be involved in collaborative work on climate change and had ongoing research projects in water and in soil.⁴⁰

Committee Comment

3.42 The Committee is pleased to see Australian Government efforts towards developing an improved approach to rural R&D. Ensuring that Australia has a robust, flexible system of rural R&D is paramount to the long term sustainability of the sector.

3.43 It is evident that the rural R&D sector in Australia is complex and requires strong government policy to keep Australian R&D sustainable and profitable. The Committee would like to acknowledge the significant work of both the Council and the Productivity Commission in conducting inquiries into the rural R&D sector. Credit should also go to the Australian Government for providing responses to both reports through the Policy Statement. The Policy Statement represented an opportunity to better coordinate, streamline and manage Australian rural R&D.

37 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 25.

38 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 3.

39 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 3.

40 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 3.

- 3.44 The Committee is pleased to see agreement by the Australian Government on many recommendations made in the reports of the Council and Productivity Commission through the Policy Statement. The Committee believes that the actions committed to through the Policy Statement should continue to be pursued. The Committee makes a number of observations on these issues.
- 3.45 RDCs should be cognisant that their program of work and investment complies with the National and Rural Research Priorities. The Committee supports the Policy Statement's position that:
- RDCs commit to established frameworks such as the National Primary Industries Research Development & Extension Framework (NPIRDEF);
 - RDCs engage with ARCom in its examination of Australian Government investment in the rural R&D sector; and
 - RDCs adhere to new accountabilities such as Statutory Funding Agreements for statutory RDCs and performance reporting requirements.⁴¹
- 3.46 Given the significant level of investment in R&D from governments at all levels, it is critical that a rigorous system of transparency and accountability is in place; and that roles and responsibilities are clear – including in how cross-sectoral initiatives are delivered.
- 3.47 The Committee therefore expresses some concern about the clarity of how investment priorities in the rural R&D sector were determined. The Australian Government asked the Council to develop a National Strategic Rural R&D Investment Plan. Once delivered, that Council was disbanded. The Australian Government then tasked ARCom to advise it on improvements for coordinated funding arrangements, priority setting and collaboration in the rural R&D sector. In the Committee's view, part of this function, namely the setting of research investment priorities, had already been considered by the Council and responded to through the Policy Statement. Clarity in this area should be provided to ensure that RDCs have an appropriate understanding of government investment priorities.
- 3.48 In terms of cross-sectoral collaboration, the effectiveness of the NPIRDEF and the RIRDC's role in supporting cross-sectoral collaboration are important areas that need further clarification.

41 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>>

- 3.49 The Committee supports recommendations made in the review of NPIRDEF and looks forward to the release of the Government's response. In particular, while reaffirming their commitment and levels of contribution to NPIRDEF, participants should actively increase collaborative efforts with universities and between NPIRDEF strategies. This should include increased knowledge and information sharing and improved communication.
- 3.50 In regards to RIRDC's cross-sectoral role, the Committee commends RIRDC for pursuing further collaborative opportunities through the latest Corporate Plan and hopes that further opportunities are pursued as resources allow. However, the Committee is concerned that some confusion exists as to the mandate of the RIRDC.
- 3.51 The Committee notes the Policy Statement highlights RIRDC as having a coordination function.⁴² However, the Productivity Commission, when recommending that a new RDC with a broad function be established, noted that the RIRDC would require a 'major overhaul' to provide broader [coordination] functions.⁴³ The Committee therefore feels that the RIRDC's cross-sectoral role and mandate should be clarified as part of the Government's response to the NPIRDEF review.

Recommendation 1

That the Australian Government work to ensure a timely and public response by the Primary Industries Ministerial Council to the National Primary Industries Research Development & Extension Framework review recommendations; and that this response clarifies the cross-sectoral role and mandate of the Rural Industries Research and Development Corporation.

Smaller industries and innovation

- 3.52 One of the RIRDC's key mandates is to maximise outcomes within new and emerging industries. This is not a function held by any other RDC.

42 Australian Government Rural Research and Development Policy Statement (11 April 2013) <<http://www.daff.gov.au/agriculture-food/innovation/rural-research-and-development-policy>> p. 1.

43 Productivity Commission, 'Rural Research and Development Corporations', *Inquiry Report 52*, February 2011, p. xxviii.

The Committee was interested in furthering its understanding not only how innovation is supported but also how small and emerging industries engage in innovation and development. Evidence to the Committee suggested that the RIRDC establishes the viability of and then provides financial and other support for some smaller and emerging industries.

- 3.53 The RIRDC has a dedicated portfolio of investment aimed at new and emerging industries.⁴⁴ Mr Craig Burns of the RIRDC told the Committee that it takes:

... the lead on ... New and Emerging Industries. All of the state governments and the Commonwealth have signed up to that as a strategy that we are supposed to get together on and try and have a coordinated approach.⁴⁵

- 3.54 Mr Burns also highlighted the size of the smaller industries that RIRDC assists in comparison with more developed counterparts stating:

The small industries that we deal with are not big in terms of contribution to GDP; the new and emerging industries that we talked about are only 2.1 per cent of total farm production or \$762 million, but they tend to be very important in the regions where they exist ... I think we are appreciated by the small industries that we deal with.⁴⁶

- 3.55 In assessing new and emerging industries, the RIRDC told the Committee that it uses a 'lifecycle' approach to new projects. Mr Burns advised the Committee that:

... the first thing we will do is have a feasibility study to see where they are at and what their needs might be and so on and then we try and target the research that is particularly useful to them. The advantage of some of those small players is that there are not a lot of them and so you can get to know who they are and you can target the research to them, and if they are particularly au fait with new technologies it is a lot easier. People agree that we should have these new industries, but they are pretty low down the pecking order in terms of funding.⁴⁷

44 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 68.

45 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 5.

46 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 1.

47 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 5.

3.56 RIRDC's Annual Report 2011-12 noted broadly the methods by which it supports these industries to progress:

- Close relationships with industry to target industry needs and enhance adoption and investment, and keep track of industry status and research needs
- Research managers liaised between industry and scientists
- Experienced scientists managing programs and adding value to research and adoption
- Being innovative and flexible
- Engaging expert scientists in research for emerging rural industries
- Building capacity for RD&E in new and emerging industries
- Growing revenue through good relationships with stakeholders
- Interacting with researchers to ensure that projects are of high quality and meet industry needs
- Disseminating research findings through a range of forums and media including field days, symposiums, workshops, fact sheets and high quality reports that are accessible industry and researchers
- Ensuring that budgets and effort match size and needs of industry⁴⁸

3.57 To guide its investment in new and emerging industries, RIRDC collaborates with New Rural Industries Australia (NRIA), an independent entity created by RIRDC aimed at 'capacity building and commercialisation of new and emerging Australian rural industries'.⁴⁹ To build capacity and commercialisation capabilities, NRIA's website states that it:

... provides advisory services for regional development initiatives that seek to build future economic sustainability through industry diversity and collaboration between industries. NRIA's project management role ensures effective collaboration between agriculture, mining, energy and indigenous commercial entities.⁵⁰

3.58 RIRDC's Annual Report 2011-12 outlines the nature of this collaboration, outlining that NRIA:

48 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 68.

49 National Rural Industries Australia, *About* (20 May 2013) <<http://www.nria.org.au/About>>

50 National Rural Industries Australia, *About* (20 May 2013) <<http://www.nria.org.au/About>>

... acts as a conduit for information dissemination and technology transfer between and across new and developing rural industries. Research results for many RIRDC projects were extended through the New Rural Industries Australia conference.⁵¹

- 3.59 The Committee also raised the issue of the financial implications of supporting new and emerging industries. The RIRDC noted that it is responsible for some 90% of investment in the sector.⁵² The RIRDC also advised the Committee that funding to support these industries comes from its core appropriation and that at times it has been difficult to leverage in-kind support, particularly from states and territories:

In a lot of cases we want to do trials, and in the past we have relied on the state governments to provide in-kind support for that and we use their labs or facilities and so on. But they are now focusing on the big-ticket industries and so the first to go in their cuts are those small industries and we are seeing it particularly in the tropical fruit area. Tasmania is a bit of a hotspot for some of our work, and so we have done a lot of work on native foods and things like that down there.

It is a problem, because the demand for that sort of research far exceeds our budget, but we are the big players in that space.⁵³

- 3.60 The RIRDC also supports the development of innovation in the industry sectors it oversees. The Committee was interested in how innovation was supported by RIRDC. To illustrate this, an example was used of an RIRDC funded, Eureka Prize winning project that tracked the flow of phosphorus through the Australian food system.⁵⁴ Phosphorus is a non-renewable resource that forms the basis of fertiliser.⁵⁵ The RIRDC told the Committee that the outcomes of the project were:

51 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 68.

52 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 5.

53 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 5.

54 Rural Industries Research and Development Corporation, *RIRDC congratulates Eureka Prize Winning phosphorus researchers* (20 May 2013)
<<http://www.rirdc.gov.au/news/2012/08/29/rirdc-congratulates-eureka-prize-winning-phosphorus-researchers>>

55 Australian Museum, *2012 Winner: Environmental Research Dr. Dana Cordell And Professor Stuart White, University of Technology Sydney* (20 May 2013)
<<http://eureka.australianmuseum.net.au/6C9577A0-88F7-11E1-8A69005056B06558/displayPageEntry>>

... really looking at the implications for the phosphorus cycle within Australia, our exposure internationally and how we engage internationally. Really it is around the price of phosphorus and the impact that would have on inputs to farming and the opportunities that we might actually have within Australia if we are also managing phosphorus. It is a really small, very focused piece of work and we are continuing on with it with a follow-up project.⁵⁶

Committee comment

- 3.61 The Committee considers that it is in Australia's interest to support smaller and emerging industries to both develop and innovate. The Committee believes that, for the smaller and emerging industries that fall within its remit, the RIRDC provides strong support to progress research and innovation. The Committee particularly supports the 'lifecycle' approach taken by RIRDC where a feasibility study is conducted prior to assistance being provided and in developing a tailored approach to suit the particular industry's needs.
- 3.62 In using this approach, the Committee wishes to emphasise its belief that where projects developed by smaller industries are deemed feasible that a number of criteria are met. Projects should be consistent with the National and Rural Research Priorities and other prescribed frameworks such as NPIRDEF. This will ensure that identified priorities are being met. Secondly, projects developed by smaller industries should be able to demonstrate a demand for the capability being developed.
- 3.63 The Committee is concerned that the RIRDC believes that in-kind support for ongoing R&D, such as through the use of laboratories or other research facilities owned by State Governments may have diminished. The Committee views that such in-kind support by State Governments should be strongly encouraged by the Australian Government.
- 3.64 Finally, the Committee believes that Australia must be innovative in order to remain competitive internationally. To do so, Australia's R&D sector must commit to longer term planning and managing the risks that this may bring. The Committee is pleased to see that Australian projects that may have international application. An example is the RIRDC sponsored, Eureka Prize winner highlighted to the Committee. This is a worthy

56 Ms Anwen Lovett, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, pp. 3-4.

project that demonstrates Australia's capabilities to take a forward looking approach to research, and should be congratulated.

Recommendation 2

The Committee recommends that the Australian Government, through the Council of Australian Governments, work ensure that State and Territory government contributions to national research and development remain proportional to Australian Government investment.

Local and Regional development

3.65 The RIRDC has explicitly renewed its commitment to R&D in regional Australia through its new Corporate Plan.⁵⁷ In particular the Corporate Plan states the RIRDC's intention to 'increase knowledge about rural industry options that offer regional economic development opportunities'.⁵⁸

3.66 The RIRDC told the Committee about projects being undertaken in regional areas to illustrate this renewed commitment:

We have two regional studies operating at the moment: one in North Queensland and one in Northern Tasmania, in which we are looking at how agriculture fits into the regional development and trying to explore some of the issues, such as what the new irrigation facilities might mean for the region, what might need to be done in terms of skills, transport and infrastructure – that sort of thing – to kick agriculture along in the region.⁵⁹

3.67 In developing projects in regional areas, Mr Burns told that Committee that RIRDC is currently negotiating with key players in these regional areas such as local universities. These negotiations will define the scope of projects, but that:

57 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 15.

58 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 15.

59 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 1.

... essentially a key plank of it will be a community forum where we will get as many people together as we can so that we are actually hearing the views of players in the region, and then doing a process after that to draw those issues out, but also develop a framework ...⁶⁰

- 3.68 Using the RIRDCs work in Tasmania as an example, Mr Burns told the Committee of how projects are defined:

We have set up a pattern where the board, once a year, will have a field trip ... We also had a board meeting in Launceston. At that we not only saw some of the programs that we are involved with in the region but we also brought together people from the RDAs, the state government, the university and so on to have a roundtable with the board to look at all of the issues that are play in the region more broadly in northern Tasmania.⁶¹

- 3.69 On the issue of outcomes for projects in regional areas, Mr Burns told the Committee that one of the themes that the RIRDC is trying to have in these regional projects is:

... of diversification and another project that we have internally is a thing that we are going to call the diversity portal. It will be a website where farmers – existing farmers, new farmers, any farmers – can go and plug in information about where they are and that will tell you options, what other people might be doing in the region.⁶²

Committee Comment

- 3.70 RDCs such as the RIRDC play an important role in regional development. The Committee is supportive of the RIRDCs emphasis on regional Australia. The Committee is also pleased to see that the RIRDC has ensured that a broad level of consultation with local stakeholders (such as those in Northern Tasmania) will be conducted. This not only increases stakeholder 'buy-in', but also helps to identify projects that may use local knowledge.

60 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 2.

61 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 2.

62 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 2.

- 3.71 While supportive of the work of RIRDC in regional Australia, the Committee wishes to emphasise the need for approved projects to demonstrate both the need for support and ongoing local benefit. Approved projects should also be thoroughly evaluated on completion. The former will ensure that projects retain a uniquely local aspect while potentially underscoring a broader application. The latter will ensure that any lessons learnt can be translated to future projects. The Committee will discuss the aspect of evaluation in more detail in the next section.

RIRDC's evaluation framework

- 3.72 To ensure that projects sponsored by the RIRDC meet agreed objectives and provide an understanding of any shortcomings, the need for evaluation is critical.

- 3.73 The RIRDC Annual Report 2011-12 outlines the evaluation framework developed for use by the RIRDC:

In 2008 a new Evaluation Framework for RIRDC was developed. This Framework, among other things, sets out a process for reviewing each of RIRDC's programs in the final year of its five year plan. The Evaluation Framework encompasses a cohesive framework for evaluating research investment at project, program and portfolio levels for both accountability and future investment planning purposes.⁶³

- 3.74 At the Committee's public hearing, it was identified that the RIRDC Annual Report 2011-12 included a section labelled "Return on Investment" in which the RIRDC's evaluation framework was outlined briefly.⁶⁴ This section, however, contained information on only one evaluation undertaken by RIRDC. Mr Craig Burns, of the RIRDC told the Committee that:

Across all of the R&D corporations there is a collaborative effort to pick a number of programs each year and do a return on investment for them, and we are part of that process. For that year, we did one on the honeybee program. That was done in a little bit more detail and done with an agreed methodology.⁶⁵

63 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 22.

64 Rural Industries Research and Development Corporation *Annual Report 2011-12*, p. 22.

65 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 1.

3.75 On this point, Mr Burns added:

... we are developing a new internal evaluation framework for all of our projects so, no matter how big our projects are, we will have at least some process for monitoring and evaluating how they progress.⁶⁶

3.76 In an effort to ensure consistency in project evaluation by RDCs, Mr Burns told the Committee that two initiatives are being undertaken. Firstly, the Australian Bureau of Agricultural and Resource Economics (ABARES) are developing a common methodology for the evaluation of Commonwealth R&D projects.⁶⁷ Secondly, a common methodology is being developed for RDCs to help compare cost-benefit analysis between RDCs for projects.⁶⁸ Mr Burns notes that this process will provide:

some rigour around comparing the different cost-benefit studies that are done. It is a work in progress, but it is one of the recommendations out of the PC that I think that RDCs and the government agreed was a sensible thing to follow up on.⁶⁹

Committee comment

3.77 The Committee considers the need for a strong evaluation framework for projects approved by the RIRDC and other RDCs is paramount. The Committee is pleased to see that the RIRDC has developed an internal evaluation framework for completed projects. The Committee hopes that further information on this framework and the outcomes of project evaluations will be published in future Annual Reports.

3.78 The Committee is encouraged to see the development of a common evaluation framework by the Australian Bureau of Agricultural and Resource Economics (ABARES). The Committee is also pleased that between RDCs, processes to improve assessment of cost-benefit analyses are being considered.

66 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, pp. 1-2.

67 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 2.

68 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 2.

69 Mr Craig Burns, Rural Industries Research and Development Corporation, *Transcript of Evidence*, Canberra, p. 2.

Recommendation 3

That the Rural Industries Research and Development Corporation continue its internal evaluation process for all projects with a view to ensuring that evaluation outcomes for a greater number of projects are a feature of future Annual Reports.

Recommendation 4

That the Australian Government, through the Australian Bureau of Agricultural and Resource Economics complete the development of the common evaluation methodology for Commonwealth research and development projects and that this be adopted for use by rural Research and Development Corporations.

Recommendation 5

That the Australian Government ensure that all rural Research and Development Corporations continue to engage collaboratively in the development of a common methodology to evaluate cost-benefit analyses of projects across rural Research and Development Corporations.

Dick Adams

Chair

